

Job Class Profile: Avionics Technician I**Pay Level: CG-28 Point Band: 578-621**

Factor	Knowledge	Interpersonal Skills	Physical Effort	Concentration	Complexity	Accountability & Decision Making	Impact	Development and Leadership	Environmental Working Conditions	Total Points
Rating	5	2	4	6	3	2	3	1	6	
Points	233	33	25	29	90	43	62	21	64	600

JOB SUMMARY

The Avionics Technician I performs skilled work in the evaluation, testing, installation, and maintenance of aircraft electronic equipment.

Key and Periodic Activities

- Installs, trouble-shoots, modifies, repairs and adjusts load distributing and generating systems on all aircrafts.
- Removes, installs, tests and calibrates aircraft instruments.
- Maintains, installs, tests and calibrates all high frequency communication equipment (Dispatch Radio System).
- Maintains, trouble-shoots, installs and calibrates such avionic equipment as Automatic Direction Finding Systems, Marker Beacon Systems, Antenna Systems, Glidescope, Instrument Landing Systems and Integrated Navigation Systems.
- Fabricates, repairs and calibrates test equipment for repairs to avionic equipment and general test equipment such as oscilloscopes, tube testers, transistor testers, tuning meters and bench mock-ups for all equipment.
- Maintains sufficient shop supplies and equipment.
- Maintains and monitors aircraft batteries and replaces, when required.
- Provides ground support to the Air Ambulance.

SKILL**Knowledge****General and Specific Knowledge:**

- Transport Canada Regulations.
- Maintenance Control Manual.
- Safe Work Procedures.
- Policies and Procedures.

Formal Education and/or Certification(s):

- Minimum: Diploma in Aircraft Maintenance Engineering Technology from a Transport Canada approved institution and possession of a valid Transport Canada AME “E” license and endorsements.

Years of Experience:

- Minimum: Less than 1 Year.

Competencies:

- Ability to follow basic instructions and work processes.
- Ability to apply established techniques to the completion of activities.
- Ability to co-ordinate a range of related work or project activities.
- Ability to operate a computer to update/maintain aircraft records and systems.
- Ability to write straightforward text.
- Ability to repair or calibrate machinery.
- Ability to operate machinery to tow aircraft and ground equipment.
- Ability to conduct analysis or assessment.

Interpersonal Skills

- Interpersonal/communication skills used include listening to information from other people and asking questions to get information to diagnose problems with instrumentation; and providing routine information and direction to others.
- The most significant contacts are with co-workers in the performance of daily work activities; avionics supervisor for work assignments and advice/guidance on problems or issues; and with the Crew Chief to establish goals and objectives.

EFFORT

Physical Effort

- The demands of the job occasionally results in fatigue, requiring periods of rest.
- Aircraft servicing requires regularly lifting or moving objects such as oil and fuel hoses weighing less than 10 lbs. and occasionally lifting or moving objects weighing over 50 lbs. when loading and unloading the aircraft is performed.
- Required to stand on a constant basis in the performance of daily activities. Walking and climbing are performed on a regular basis and activities requiring sitting, driving and working in awkward or cramped positions or body movement when performing repair work are required on an occasional basis.
- Manual or physical activities include performing fine finger or precision work; using hand tools that require accurate control and steadiness; using gross motor skills; using machinery or equipment that requires very controlled movement; operating heavy equipment and maintaining physical balance.

Concentration

- **Visual** concentration or alertness is required when referring to reference manuals and publications; using hand tools; installing aircraft parts, soldering or performing wiring repairs.
- Auditory concentration or strain is experienced when performing maintenance work on

aircraft systems around loud fans and electronics.

- Other sensory demands such as **smell** are important to detect if equipment is overheating on aircraft.
- Performing avionics assembly and repair requires **eye/hand coordination**.
- **Alertness and concentration** are required when performing **repetitive** tasks such as the movement and servicing of an aircraft. **Higher than normal levels of attentiveness or alertness** is required when servicing and moving an Air Ambulance with crew and patients on board.
- **Time pressures and deadlines** are experienced as all aircraft, particularly essential air services such as the Air Ambulance and water tankers during the fire season, must be repaired and returned to service as quickly as possible. **Interruptions and lack of control over work pace** are experienced occasionally and can occur when there is an urgent requirement to service an aircraft such as an air ambulance or when parts to complete a repair are unavailable.
- **Exact results and precision** are required to meet Aircraft Manufacturer's Specifications and Transport Canada Regulations.

Complexity

- Work involves the evaluation, testing, installation and maintenance of aircraft electronic equipment which requires performing a series of tasks and activities that are quite different but use similar skills and knowledge.
- Typically, aircraft electrical or electronic system malfunctions require analysis and the application of troubleshooting techniques and test procedures to solve the problem in a timely and cost effective manner.
- Reference material to assist in addressing problems, challenges and issues include aircraft manufacturer's maintenance and wiring manuals; maintenance control manual; Canadian Aviation Regulations; technical representatives and advice and support from supervisor.

RESPONSIBILITY

Accountability and Decision-Making

- Daily work activities are carried out with independently, but within a highly structured and regulated environment. However, completed work is reviewed, evaluated and certified by a senior technician to ensure conformation with Transport Canada Regulations and Airworthiness Standards.
- Discretion and judgement is exercised when trouble-shooting problems and performing maintenance work on aircraft.

Impact

- Work results can have a positive impact within the immediate work area; department; organization; and on clients/patients/general public.
- Work also impacts resources such as equipment; processes and systems; information; finances; material resources; human resources; health and safety and corporate image when the electrical avionics equipment in government aircraft is repaired on a timely basis and returned to service in an airworthy condition to ensure essential services are not disrupted.

- Mistakes or errors can result in delays in aircraft returning to service; disruption of essential air services such as the air ambulance or fire fighting services; increased financial costs if equipment is not maintained and functioning properly; health and safety issues for passengers, patients and crew if aircraft is not airworthy; and a negative impact on the corporate image.
- Aircraft maintenance work is highly monitored and controlled by regulations. Work is closely supervised and quality assurance checks are in place. Mistakes/errors are typically resolved within hours of identification to ensure airworthiness of aircraft.

Development and Leadership of Others

- Not responsible for the supervision of staff or to provide development and leadership to others.

WORKING CONDITIONS

Environmental Working Conditions

- There is a requirement to wear safety equipment such as safety glasses; gloves; shoes; safety harness when working at heights and hearing protection is required when engines are running.
- The likelihood of minor cuts, bruises, abrasions or minor illnesses is moderate. Fractures or partial/total disability is limited.
- There is exposure to noise from fans, aircraft engines and rivet guns; fumes from aircraft jet engines; hazardous cleaning chemicals; bodily fluids and odours when working on Air Ambulance aircraft; dangerous heights when working on top of an aircraft; awkward or confining workspaces when working in an aircraft; and physical danger when aircraft engines and propellers are running.